**Homework 2 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Line Segments Period: \_\_\_\_\_\_\_\_Advisor:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Failure to show work on all problems will result in a LaSalle.**

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| 1. Measure the following line segments to the nearest tenth of a centimeter and the nearest of an inch.    AB: \_\_\_\_\_\_\_\_ centimeters \_\_\_\_\_\_\_\_\_ inches  CD: \_\_\_\_\_\_\_\_ centimeters \_\_\_\_\_\_\_\_\_ inches | 2. On a particular line segment, points *A*, *B*, and *C* are collinear. If *AC* = 15 and *AB* = 9, what is the measure of *BC*? |
| 3. Find *KM.* | 4. Find *ST.* |
| 5. Find *BC.* | 6. If *AC* = 35, what is the value of MC?  x + 5 2x  A M C |
| 7. On the map, AB represents a trail that you are hiking. You start from the beginning of the trail and hike for 90 minutes at a rate of 1.4 miles per hour. How much farther do you need to hike to reach the end of the trail? | 8. **On a separate sheet of graph paper**, plot the given points in a coordinate plane. Then state whether the line segments are congruent.   1. Plot the points *A*(2, 2), *B*(4, 2), *C*(–1, –1), *D*(–1, 1)   Are AB and CD congruent? \_\_\_\_\_\_\_\_\_\_\_\_\_   1. Plot the points *M*(1, –3), *N*(4, –3), *O*(3, 4), *P*(4, 4)   Are MN and OP congruent? \_\_\_\_\_\_\_\_\_\_\_\_\_   1. Plot the points *E*(–3, 4), *F*(–1, 4), *G*(2, 4), *H*(–1, 1)   Are EG and FH congruent? \_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Mixed Review**

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| 1. Solve for x.  *x + 2x = 18* | 2. Find *LM*. |
| 3. Solve for x.  *3x + x + 8 = 32* | 4. Find *VW*. |
| 5. Solve for x.  *2x + 3 + 3x – 1 = 27* | 6. Find *YZ*. |
| 7. Solve for y. | 8. Solve for a. |
| 9. Solve for C. | 10. Solve for h. |